# **Drexel University College of Medicine**

Early Detection of Liver Cancer and Hepatitis

## **Objective**

To develop methods for the early detection of hepatocellular carcinoma and hepatitis.

## **Program Description**

Individuals chronically infected with hepatitis B or C viruses are at high risk for the development of hepatocellular carcinoma (HCC). Given the limitations of current clinical tools and the growing hepatitis population, advances in detection, diagnostic, and predictive models for HCC would have substantial health benefits.

## **Specific Aim**

- Investigate serum polypeptides from individuals at different stages in the disease continuum using two–dimensional gel electrophoresis.
- Identify polypeptides that correlate by their appearance, disappearance, or post—translational modification with disease status and develop highly specific and sensitive tests for assaying specific polypeptide profiles.
- Identify polypeptides specific for HCC and determine whether they are selectively present in serum of patients prior to the diagnosis of HCC and can serve as early detection makers.
- Identify and characterize these promising markers for validation at collaborating Network centers and laboratories.

### **Contact Information**

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